



Gender Involvement in Crop Production and Livestock Related Activities in Chitwan and Lamjung District of Nepal

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Abstract— A study was carried out during 2019 with the aim to access gender involvement in crop production and livestock sector. Two hundred and forty (240) smallholder farmers were selected randomly, 120 smallholder farmers each from Chitwan and Lamjung district of Nepal. Findings revealed that the gender involvement in most of the activities on crop production and livestock is dominated by joint participation of both male and female. However, in terms of technology adoption and control over land resources, status of female participation was quite low compared to male. Thus it is recommended to bring equal involvement of both male and female in all aspects of production and resources control.

Keywords— Gender involvement, smallholder farmers, crop production, livestock.

I. INTRODUCTION

Nepal being an Agrarian country, agriculture production accounts for around 24.26% of total GDP and about three-quarters of the population work in agriculture sector of Nepal (MoAD, 2019). Socially constructed relationship between men and women in a society is referred as 'Gender' (Eagly, 1987). Gender role refers to how men and women should think, act and feel according to the existing norms and traditions in our society (Groverman and Gurung, 2001). Gender roles are highly influenced by the interactions between individuals and their social, historical and economic environments (West and Zimmerman, 1987). Strong relationship exists between gender and agricultural activities in the Nepalese household (Bajracharya, 1994; Devkota and Pyakuryal, 2006). Gender roles are dynamic and changing as per the societal change (Devkota, 2010). This study aims to access gender involvement in crop production and livestock sector at the household of Chitwan and Lamjung district.

II. METHODOLOGY

The study was carried out in Chitwan and Lamjung district of Nepal during 2019. Smallholders constitute more than

50% of Nepalese farmers, cultivating less than 0.5 ha per household (CBS, 2011). Hence, to get the knowledge of the dominant workforce, all smallholder farmers constituted the population of the study. One hundred and twenty (120) farmers were selected randomly from each district. Information was largely collected through FGD, KII and face to face interview schedule conducted using pre-tested questionnaire with household head. Frequency was used to interpret the findings of the study.

III. RESULTS

3.1 Basic information of the respondents

Gender, age, education, ethnicity, occupation, farming experience, number of male and female per household of the respondents were measured and categorized (Table 1). Out of 240 households surveyed, findings revealed that majority of the respondents were male. Similarly, majority of the respondents were of economically active age group. Half of the respondents had intermediate and higher degree of education. Majority of the respondents were Brahmin/Chhetri. More than half of the respondents were dependent only on agriculture as source of income. Majority of the respondents had greater than 30 years of

farming experience. Number of males per household was higher compared to number of number of female in range of 5-10 size.

Table 1. Basic information of the respondents across the study districts

| Basic information | Frequency |
|--------------------------------------|-------------|
| Gender of household head | |
| Male | 164 (68.33) |
| Female | 76 (31.67) |
| Age of household head (years) | |
| Economically active(15-59) | 164 (68.33) |
| Dependent(<14 and >60) | 76 (31.67) |
| Education | |
| Illiterate | 30 (12.5) |
| Lower level | 16 (6.67) |
| Secondary level | 70 (29.17) |
| Intermediate | 84 (35) |
| Bachelor | 40 (16.66) |
| Ethnicity | |
| Brahmin/Chhetri | 176 (73.33) |
| Janajati | 60 (25) |
| Dalit | 4 (1.67) |
| Occupation | |
| Agriculture | 136 (56.67) |
| Agriculture + off farm | 104 (43.33) |
| Farming experience (years) | |
| 1 - 15 | 2 (0.83) |
| 16- 30 | 74 (30.83) |

>30 164 (68.34)

Number of males per household

1-4 108 (45)

5-10 132 (55)

Number of female per household

125 (52.08)

1-4 115 (47.92)

5-10

Source: Field Survey, 2019.

Note: Figures in parentheses indicate percentage

3.2 Gender involvement in crop production related activities

Both men and women were involved in the activities related to crop production (Table 2). However, the degree, level, and stage of gender participation in various activities related to the crop production varied from one to other. Some of the activities were predominantly done by male, some by female and some of them were done by both male and female. In agricultural activities such as buying of seeds, land preparation, planting and sowing, there was major involvement of both the gender, which was 55.83%, 52.5%, 50% and 50% respectively. In contrast to that, activities such as tilling and weeding were dominantly handled by female member. There was involvement of only 15% male in postharvest operation which was very low as compared to female involvement (42.5%). However, financial and decision making activities such as selling of land, leasing of land and adoption of technology were mainly handled by male member of the household which includes 68.33%, 68.33% and 65.83% male involvement respectively.

Table 2. Gender involvement in crop production related activities across the study districts

| Activities | Gender involvement in crop production related activities (n=240) | | |
|------------------------|--|------------|-------------|
| | Male | Female | Both |
| Buying of seeds | 36 (15) | 70 (29.17) | 134 (55.83) |
| Land preparation | 74 (30.83) | 40 (16.67) | 126 (52.5) |
| Planting | 54 (22.5) | 66 (27.5) | 120 (50) |
| Sowing | 54 (22.5) | 66 (27.5) | 120 (50) |
| Tilling | 52 (21.67) | 102 (42.5) | 86 (35.83) |
| Weeding | 52 (21.67) | 102 (42.5) | 86 (35.83) |
| Harvesting | 38 (15.83) | 60 (25) | 142 (59.17) |
| Postharvest operations | 36 (15) | 102 (42.5) | 102 (42.5) |

| | | | |
|------------------------|-------------|------------|------------|
| Selling of produce | 80 (33.33) | 70 (29.17) | 90 (37.5) |
| Selling of land | 164 (68.33) | 30 (12.5) | 46 (19.17) |
| Leasing of land | 164 (68.33) | 30 (12.5) | 46 (19.17) |
| Adoption of technology | 158 (65.83) | 42 (17.5) | 40 (16.67) |

Source: Field Survey, 2019

Note: Figures in parentheses indicate percentage respondents' responses

3.3 Gender involvement in livestock related activities

In contrast to the crop production, there was found to be higher involvement of both the gender in most of the livestock related activities (Table 3). Activities such as fodder collection, watering to the animals and overall management were carried by women in greater extent compared to the male, however, there was no such significance difference in frequencies. Male participation

was found to be higher in decision making activities such as adoption of technology. Only 16.67% female own full decision making power for technology adoption whereas 63.33% male hold full power in decision making. Activities such as milking of animals and grazing were also dominated equally by both the genders which accounts for 45.84% and 44.17% frequency respectively.

Table 3. Gender involvement in livestock related activities across the study districts

| Activities | Gender involvement in livestock related activities (n=240) | | |
|--|--|------------|-------------|
| | Male | Female | Both |
| Feed preparation to the animals | 48 (20) | 74 (30.83) | 118 (49.17) |
| Fodder collection | 46 (19.17) | 70 (29.17) | 124 (51.66) |
| Watering to the animals | 34 (14.17) | 70 (29.17) | 136 (56.66) |
| Overall care and management of livestock | 44 (18.33) | 50 (20.83) | 146 (60.84) |
| Milking animals | 74 (30.83) | 56 (23.33) | 110 (45.84) |
| Grazing animals | 74 (30.83) | 60 (25) | 106 (44.17) |
| Decision to sell animals | 70 (29.16) | 40 (16.67) | 130 (54.17) |
| Adoption of technology | 152 (63.33) | 40 (16.67) | 48 (20) |

Source: Field Survey, 2019

Note: Figures in parentheses indicate percentage respondents' responses

IV. DISCUSSION

There was found to be varied involvement of male and female in different activities related to crop production. Greater time and effort demanding task such as land preparation, sowing and harvesting were done by involvement of both the gender. Zewdu et al. (2016) reported that males were found to be more involved in ploughing and harvesting of horticultural crop. But this was found quite different in our study. Although tillage is considered to be extremely laborious job, it was performed by involvement of women to greater extent. Olowa and

Olowa (2015) found that women are more involved in weeding, watering, transplanting and harvesting. Similarly, there was greater involvement of women in activities such as weeding, harvesting and post-harvest operation. There was greater involvement of male in adoption and decision making task such as selling of land, leasing of land and technology adoption. Result is in line with Agarwal (2015) who reported lack of ownership and access to land for women. FAO (2010) reported female have no access to and decision-making role on technology use. Ogato et al. (2009) reported man as the principal decision maker in

family being household head. Zewdu et al. (2016) also revealed that men are the heads of households and are the principal decision-makers in most of the household however it might involve some consultation with women. The patriarchal system is seen to be accelerating factor for domination of male over female. In case of livestock related activities, there was greater involvement of both the gender. Feed preparation, fodder collection, watering and other management related activities of livestock was performed jointly regardless of gender whereas male involvement was found to be higher in technology adoption related decision. But in case of selling of produce and animals, involvements were made jointly.

V. CONCLUSION

Findings of this study revealed that gender involvement in most of the activities on crop production and livestock is not single domination of either male or female, but towards joint participation of both. However, access of female in terms of technology adoption and control over land resources were quite low compared to male. Thus, it is suggested that, implementing program and policies which would bring equal involvement of both male and female in all aspects of production and resources control will be helpful.

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